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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,199	12/09/2003	Martin B. Wolk	59001US002	4389
32692	7590	06/21/2005	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			SCHILLING, RICHARD L	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/731199

Applicant(s)

Examiner

R L Schilling

Group Art Unit

1752

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 5-18-05
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-17 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-17 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on 12-9-03 is/are accepted ~~objected to~~ by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 5-18-05
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

1. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over International Publication 99/219935 or Vitukhnovsky et al. both further in view of Bellmann et al. The international publication (see particularly pages 3, 4, page 6, lines 1 and 2, page 2, lines 3-15, page 6, line 22 - page 9, line 25) discloses the use of dendrimers as light emitters instead of light emitting polymers in organic light emitting devices for the advantages of efficiency of light emission, color control and selection, processing and improved chemical and thermal stability. The light emitting layers of the international publication include those consisting of light emitting dendrimers. Vitukhnovsky et al. (see particularly paragraphs 68 and 73) disclose light emitting devices with light emitting layers consisting of light emitting dendrimers which may be

solvent coated or vapor coated. The light emitting layers consisting of light emitting dendrimers in the international publication and Vitukhnovsky are not disclosed as being formed by thermal transfer by heating thermal transfer donors. However, Bellmann et al. (see particularly column 8, lines 15-27; column 14, line 27 - column 22, line 52; column 6, line 11 - column 7, line 20) discloses thermal transfer donors with a transfer layer comprising amorphous matrices of dendrimers. The dendrimer cores of Bellmann et al. include those of International Publication No. 99/21935 which are preferably light emitting. Bellmann et al. disclose that amorphous dendrimer layers with light emitting material provide improvements over the transfer of light emitting polymers in that thermal transfer of the amorphous dendrimer matrices provides better clear edge formation. Bellmann et al. also discloses that thermal transfer of light emitters is preferred over vapor or solvent coating of emitters to reduce the formation of crystals. Since Bellmann et al. disclose that amorphous dendrimers, including those of the international publication which may be light emitting, may be imagewise thermal transferred to receptors from donors and that thermal transfer of dendrimers is better than solvent or vapor coating, it would be obvious to one skilled in the art to form the light emitting layers of the international publication or Vitukhnovsky

et al. by providing the light emitting dendrimers of the international publication or Vitukhnovsky et al. in thermal transfer donors as in Bellmann et al. and thermally transferring the light emitting dendrimers to light emitting devices. One skilled in the art would be motivated to use thermal transfer of the light emitting dendrimers of the international publication and Vitukhnovsky et al. to form the light emitting devices in the international publication and Vitukhnovsky et al. in order to obtain the advantages of clear edge formation and reduction of formation of crystals associated with thermal transfer of dendrimers from thermal transfer donors as in Bellmann et al. It is noted that Bellmann et al. disclose transfer layers of amorphous dendrimer matrices and light emitting materials. However, the international publication and Vitukhnovsky et al. disclose light emitting layers consisting of light emitting dendrimers alone which would be obvious to make using thermal transfer donors as in Bellmann et al. containing transfer layers consisting of light emitting dendrimers.

2. Any inquiry concerning this communication should be directed to Mr. Schilling at telephone number (571) 272-1335.

RLSchilling:cdc

Serial No. 10/731,199

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Art Unit 1752

June 14, 2005

RICHARD L. SCHILLING
PRIMARY EXAMINER
GROUP 1100/1752

A handwritten signature in black ink, appearing to be 'R. Schilling', written over the printed name and group number.